

IN THE CLAIMS:

1 1. (Currently Amended) An optical fiber holder comprising: a tubular member for
2 fitting over and adjacent a light receiving end portion of an optical fiber bundle comprising a
3 bundle of plural optical fibers to prevent the light receiving end portion of optical fibers from
4 separating from each other; and a pressing structure for exerting a pressing force on the optical
5 fiber bundle in a direction perpendicular to a longitudinal direction of the optical fiber bundle to
6 press the optical fiber bundle against an inner periphery of the tubular member.

1 2. (Original) The optical fiber holder in accordance with claim 1, wherein the
2 pressing structure comprises an aperture extending through a peripheral wall of the tubular
3 member from an outer periphery of the tubular member to the inner periphery of the tubular
4 member, and a pressing member for exerting the pressing force on the optical fiber bundle
5 through the aperture.

1 3. (Original) The optical fiber holder in accordance with claim 1, wherein the
2 pressing structure is spaced a predetermined distance apart from a leading edge of the optical
3 fiber bundle in the longitudinal direction.

1 4. (Original) The optical fiber holder in accordance with claim 1, wherein the
2 pressing structure is located inwardly of the outer periphery of the tubular member.

1 5. (Cancelled)

1 6. (Currently Amended) An optical fiber holder comprising a tubular member for
2 fitting over and adjacent a light receiving portion of an optical fiber bundle comprising a bundle
3 of plural optical fibers to prevent the light receiving end portion of the optical fibers from

4 separating from each other, the tubular member defining an aperture extending through a
5 peripheral wall of the tubular member from an outer periphery to an inner periphery of the
6 tubular member.

1 7. (Original) An optical fiber holder comprising a tubular member for fitting over
2 an optical fiber bundle comprising a bundle of plural optical fibers to prevent the optical fibers
3 from separating from each other, wherein: the tubular member has an inner periphery
4 comprising a holding portion having a diameter capable of holding the optical fiber bundle
5 relatively tightly; and a larger-diameter portion located closer to a leading edge of the optical
6 fiber bundle than the holding portion and having a larger diameter than the holding portion; and
7 the larger-diameter portion is shaped such that planes tangential to respective of predetermined
8 two points on the larger-diameter portion contain respective opposite components that are
9 symmetric with respect to an axis along which the optical fiber bundle extends through the
10 tubular member.

1 8. (Currently Amended) A method of holding an optical fiber bundle, comprising
2 the steps of: inserting the optical fiber bundle comprising a bundle of plural optical fibers
3 through a tubular member having an aperture extending through a peripheral wall thereof from
4 an outer periphery to an ~~outer~~ inner periphery of the tubular member; injecting a predetermined
5 amount of adhesive into the optical fiber bundle through the aperture to fix and hold the optical
6 fibers tightly.

1 9. (Currently Amended) An optical fiber bundle holder comprising:

2 a connector unit having a bore extending there through;

3 a tubular member of a dimension to be received and secured within the connector
4 unit bore, the tubular member has a conduit for receiving an optical fiber bundle;

5 a pressing member for exerting a compressive force on the optical fiber bundle,
6 the tubular member having an ~~opening~~ intermediate groove between opposite longitudinal ends
7 of the tubular member for communicating with the bore for accommodating and to enable a
8 portion of the optical fiber to extend within the groove whereby a contact of the pressing member
9 occurs in the groove with the optical fiber bundle; and

10 a member for securing the tubular member within the connector unit wherein the
11 pressing member exerts a compressive force traverse to a longitudinal direction of the optical
12 fiber bundle for restraining relative movement of the optical fiber bundle.

1 10. (Currently Amended) The optical fiber bundle holder of Claim 9 wherein the
2 pressing member is a resilient encircling band member that contracts against the optical fiber
3 bundle when released within the groove.

1 11. (Previously Presented) The optical fiber bundle holder of Claim 9 wherein the
2 pressing member includes a semi-cylindrical member and setscrew extending through the
3 connector unit for applying pressure on the semi-cylindrical member.

1 12. (Currently Amended) An optical fiber holder assembly comprising:

2 a connector body having a first bore extending therethrough;

3 a tubular member having a second bore extending therethrough, the tubular
4 member has an opening transverse to an axis of the second bore and extending through to the
5 second bore, wherein the first bore is larger than an outer circumference of the tubular member;

6 a first fastener on the connector body for engaging a first optical fiber bundle
7 mounted in the first bore;

8 a second fastener on the connector body for engaging the tubular member
9 whereby a communicating alignment ~~can be~~ is held between the first optical fiber bundle
10 mounted in the first bore and a second optical fiber bundle mounted in the tubular member; and

11 holding means inserted within the transverse opening for holding the second
12 optical fiber bundle relative to the tubular member.

1 13. (Cancelled)

1 14. (Currently Amended) The optical fiber holder assembly of Claim [[13]] 12

2 wherein the holding means is a fluid adhesive.

1 15. (Currently Amended) The optical fiber holder assembly of Claim [[13]] 12

2 wherein the holding means is a flexible elastic band that is dimensioned to be in a state of tension
3 when encircling the tubular member and extending within the transverse opening to press the
4 second optical fiber against an interior of a portion of the second bore.

1 16. (Previously Presented) The optical fiber holder assembly of Claim 12 wherein an
2 entrance opening of the tubular second bore is surrounded by a beveled surface on the tubular
3 member.

1 17. (Previously Presented) The optical fiber holder assembly of Claim 12 wherein the
2 tubular member is bifurcated with a front tubular part and a rear tubular part.

1 18. (New) An optical fiber holder comprising:
2 a tubular member for fitting over an optical fiber bundle comprising a bundle of
3 plural optical fibers to prevent the optical fibers from separating from each other; and
4 a pressing structure for exerting a pressing force on the optical fiber bundle in a
5 direction perpendicular to a longitudinal direction of the optical fiber bundle to press the optical
6 fiber bundle against an inner periphery of the tubular member, wherein the inner periphery of the
7 tubular member comprises a holding portion having a diameter capable of holding the optical
8 fiber bundle relatively tightly, and a larger-diameter portion located closer to a leading edge of
9 the optical fiber bundle than the holding portion and having a larger diameter than the holding
10 portion, the larger-diameter portion being configured to fit around a fused leading end portion of
11 the optical fiber bundle inserted through the tubular member.

1 19. (New) The optical fiber holder in accordance with claim 18, wherein the
2 pressing structure comprises an aperture extending through a peripheral wall of the tubular
3 member from an outer periphery of the tubular member to the inner periphery of the tubular
4 member, and a pressing member for exerting the pressing force on the optical fiber bundle
5 through the aperture.

1 20. (New) The optical fiber holder in accordance with claim 18, wherein the pressing
2 structure is spaced a predetermined distance apart from a leading edge of the optical fiber bundle
3 in the longitudinal direction.

1 21. (New) The optical fiber holder in accordance with claim 18, wherein the pressing
2 structure is located inwardly of the outer periphery of the tubular member.